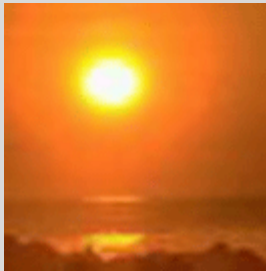
Drought and Heat Wave of 2012
Midwest and Great Plains

- **Worst drought since 1956 with ~60% of contiguous U.S. under drought, worst agricultural drought since 1988**
- **38% of corn crop in poor-very poor condition. This was the largest corn crop acreage planted since 1937**
- **Soybean crop at 34% good-excellent category – down from 56% at start of season**
- **1297 counties in 29 states designated natural disaster areas**

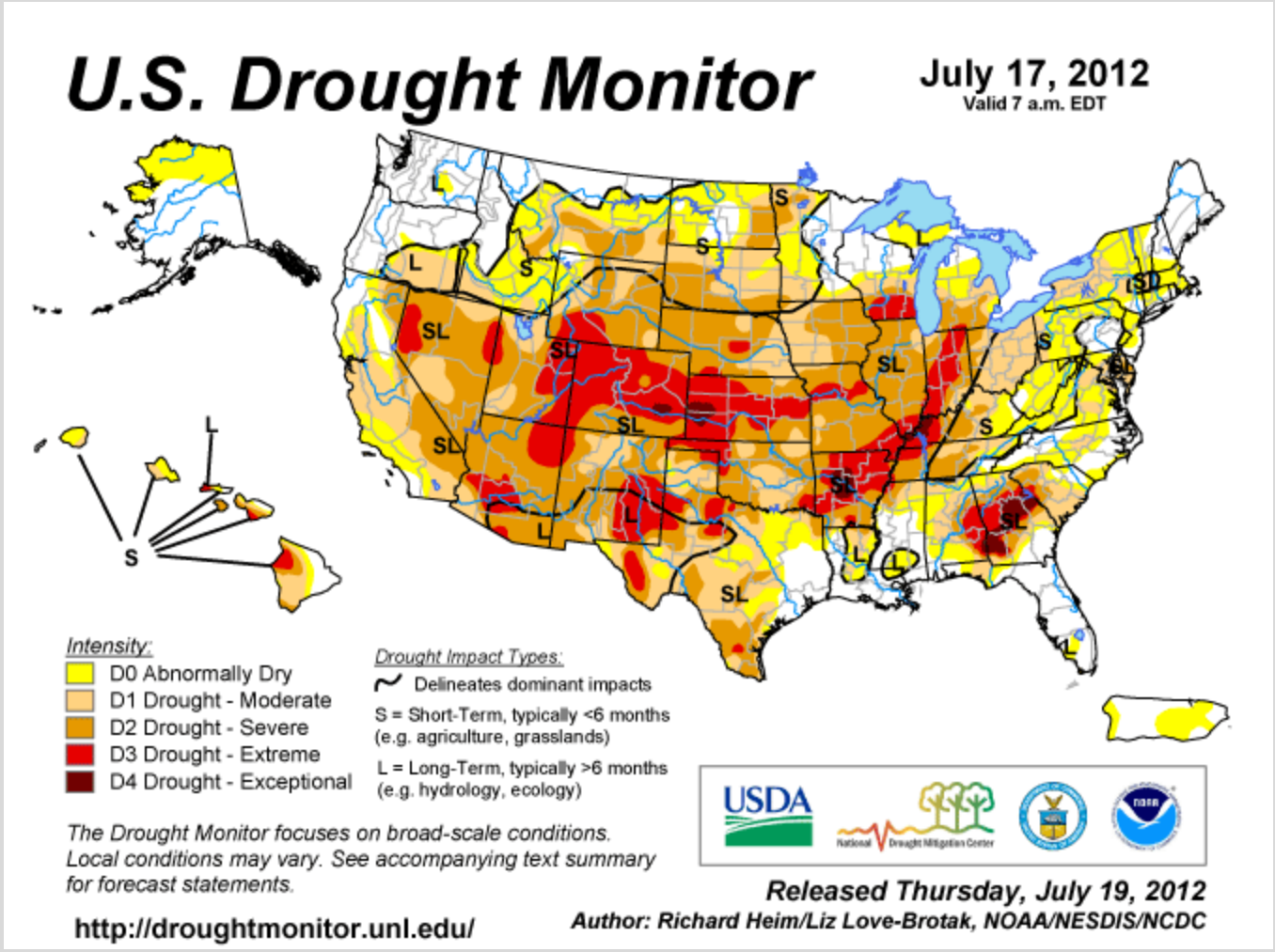
Source:
USDA http://www.usda.gov

Contact: John Eise john.eise@noaa.gov



Drought
Latest Conditions

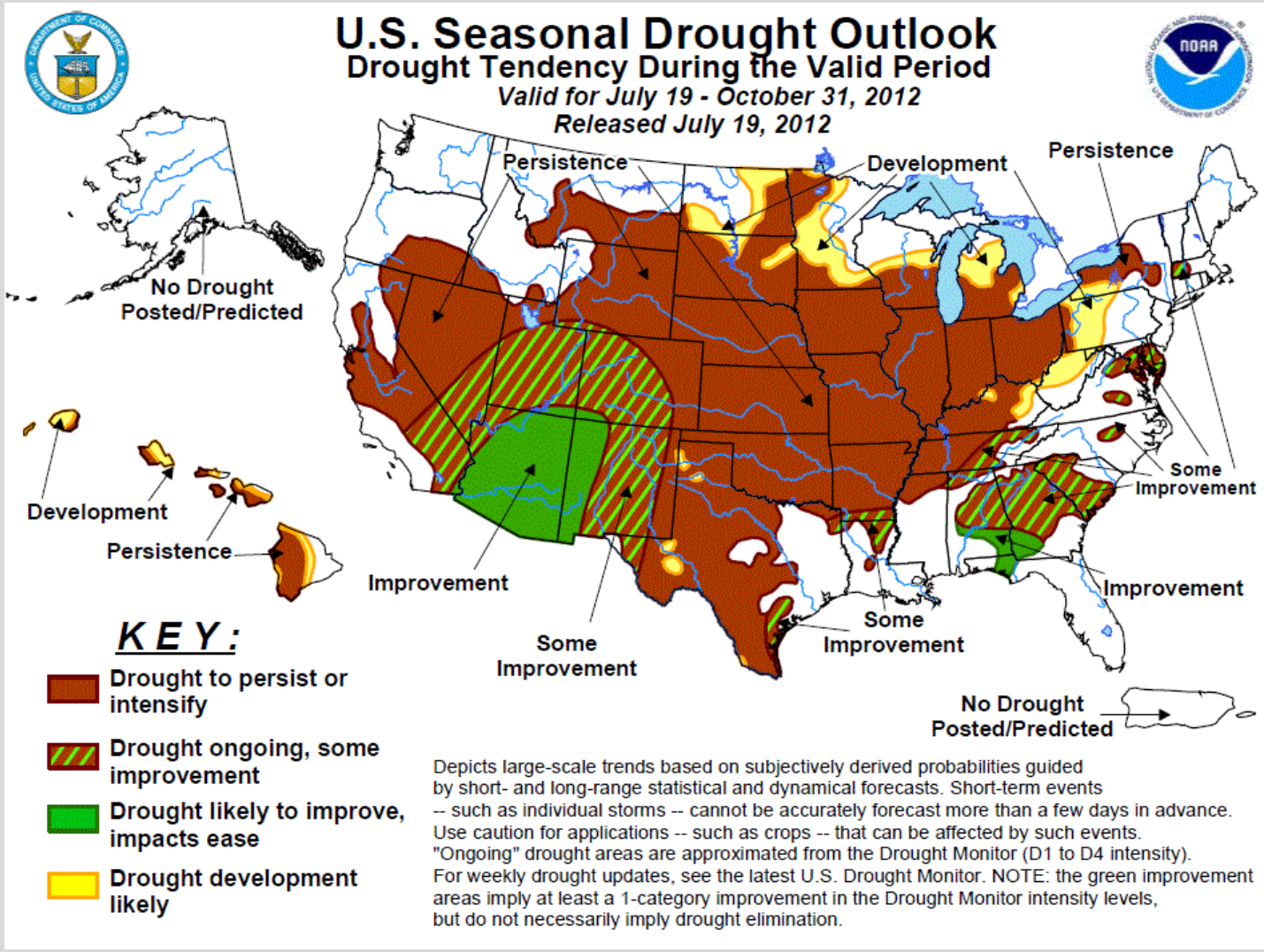
- Exceptional to Severe Drought across parts of Wyoming, Colorado, Kansas, Missouri, Illinois and Indiana
- Areas outside of dry conditions are parts of North Dakota, Minnesota , Wisconsin and Michigan
- Updated Weekly on Thursday



Source:
U.S. Drought Mitigation Center
http://www.droughtmonitor.unl.edu/

Drought
Outlook thru October

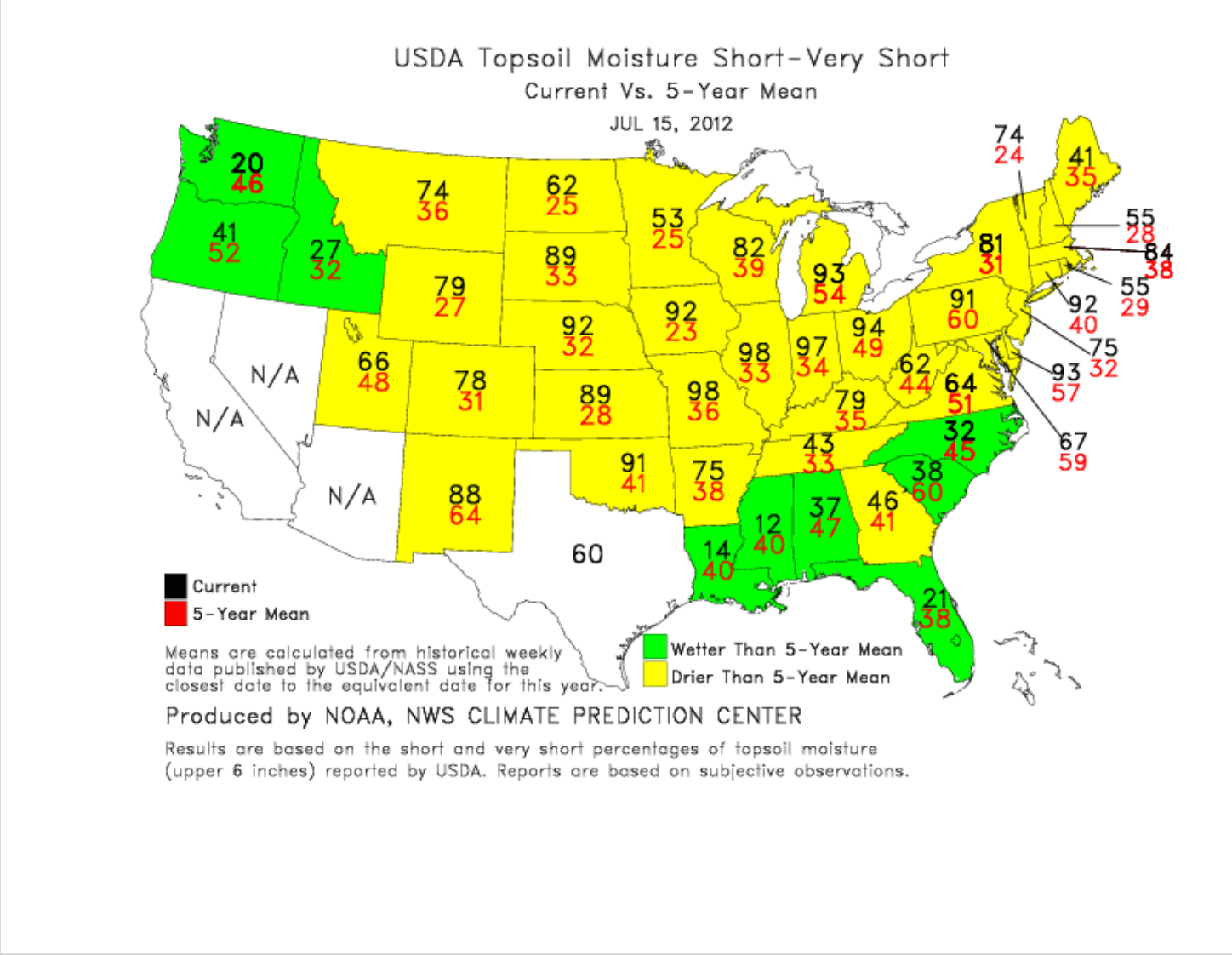
- Drought to persist or intensify across Central Region
- Only areas to remain outside of drought are parts of west North Dakota, east Minnesota , north Wisconsin, north Michigan, and east Kentucky
- Next update on July 26th



Source:
National Climatic Data Center
http://www.ncdc.noaa.gov/sotc/

6-inch Topsoil Moisture Short-Very Short vs. 5-yr Mean

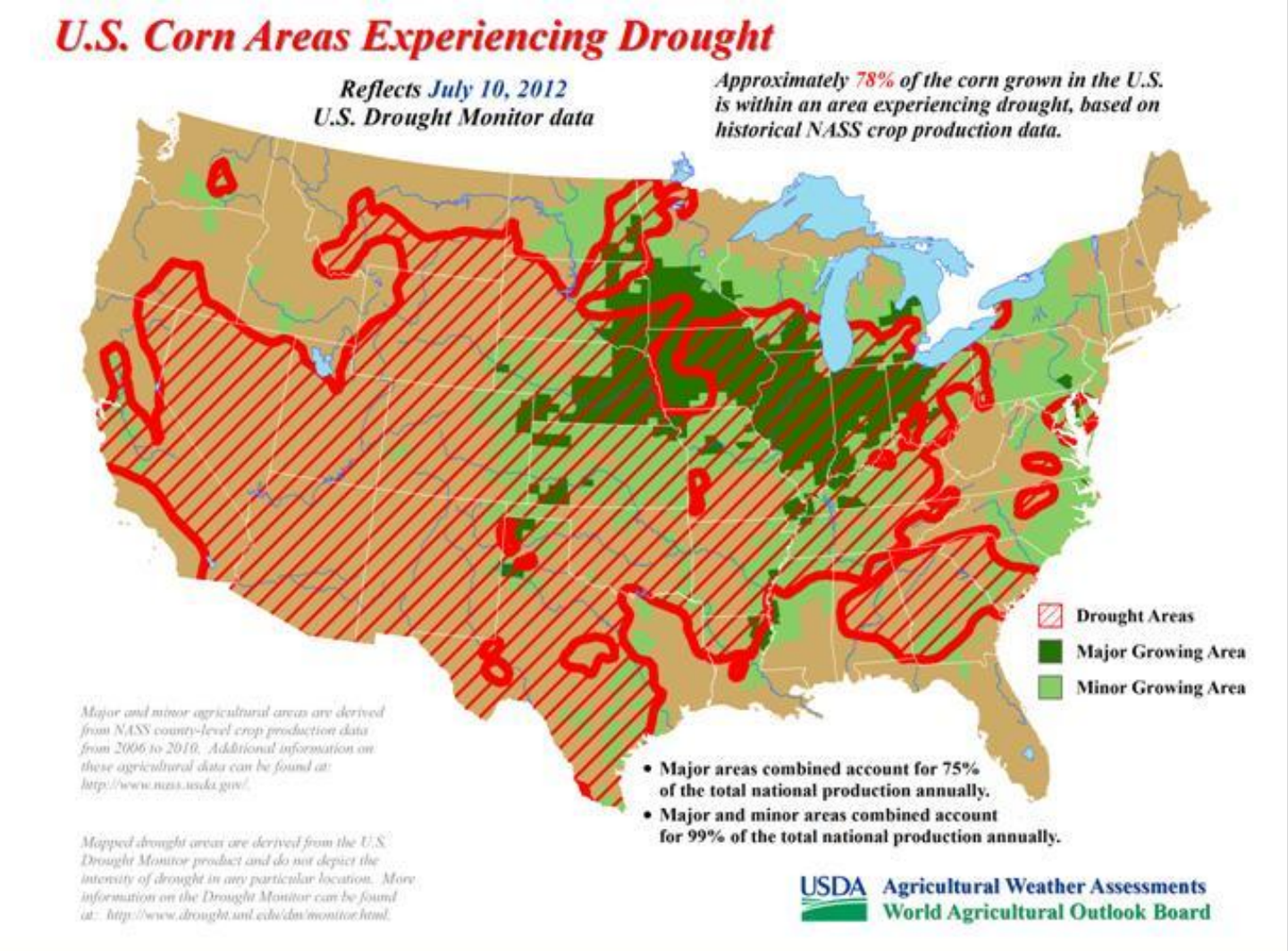
- < ~10% topsoil moisture left in South Dakota, Nebraska, Iowa, Kansas, Missouri, Illinois, Indiana and Michigan
- All of Central Region is less than half of normal topsoil moisture.



Source:
National Climatic Data Center
http://www.ncdc.noaa.gov/sotc/

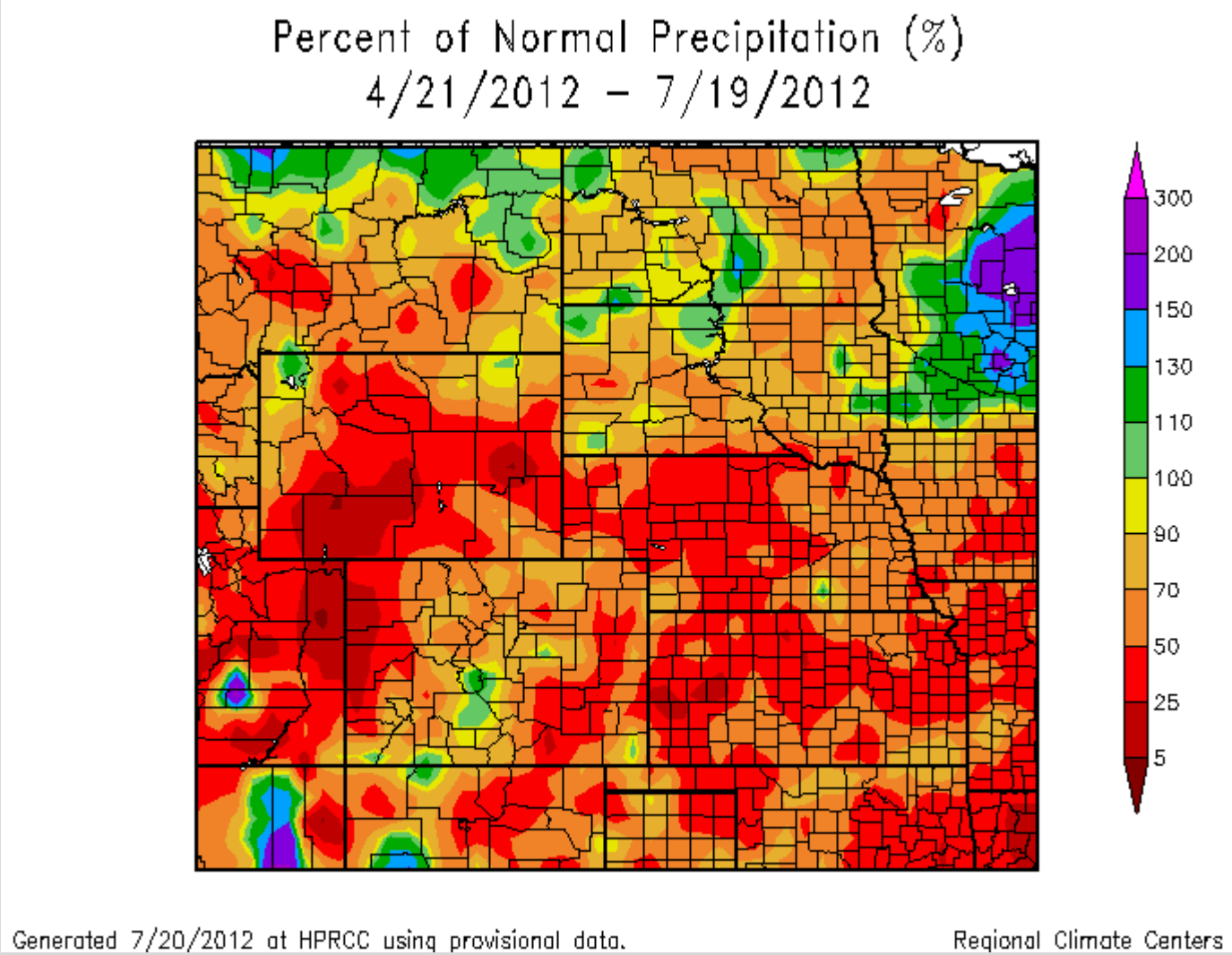
Corn and Drought

- 78% of corn grown in the U.S. is experiencing drought
- Almost all corn is grown within Central Region



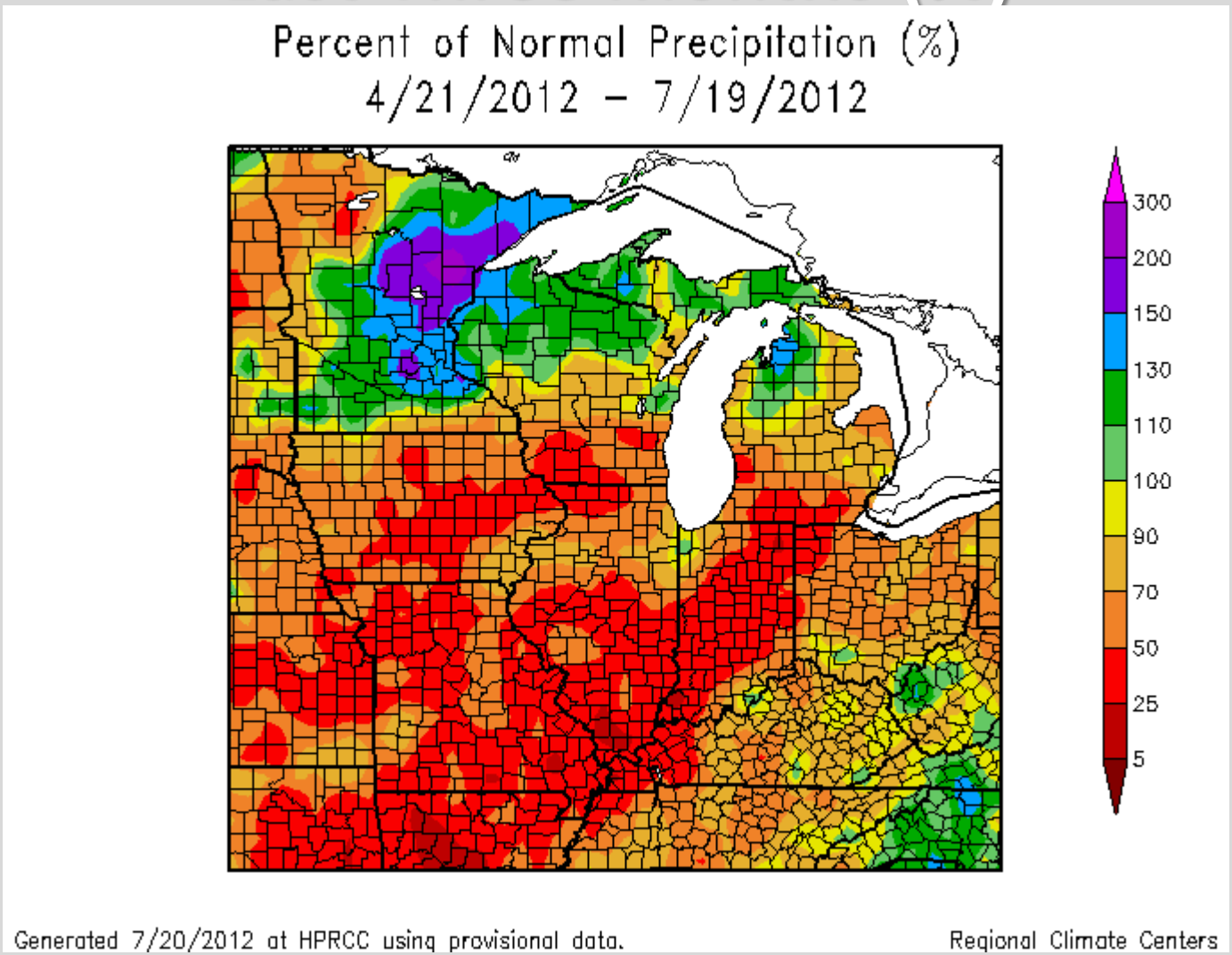
Source:
U..S. Dept. of Agriculture
http://blogs.usda.gov/

Precipitation – Change from Normal Last Three Months (%)



Source:
High Plains Regional Climate Center
http://www.hprcc.unl.edu/

Precipitation – Change from Normal Last Three Months (%)



Source:
High Plains Regional Climate Center
http://www.hprcc.unl.edu/

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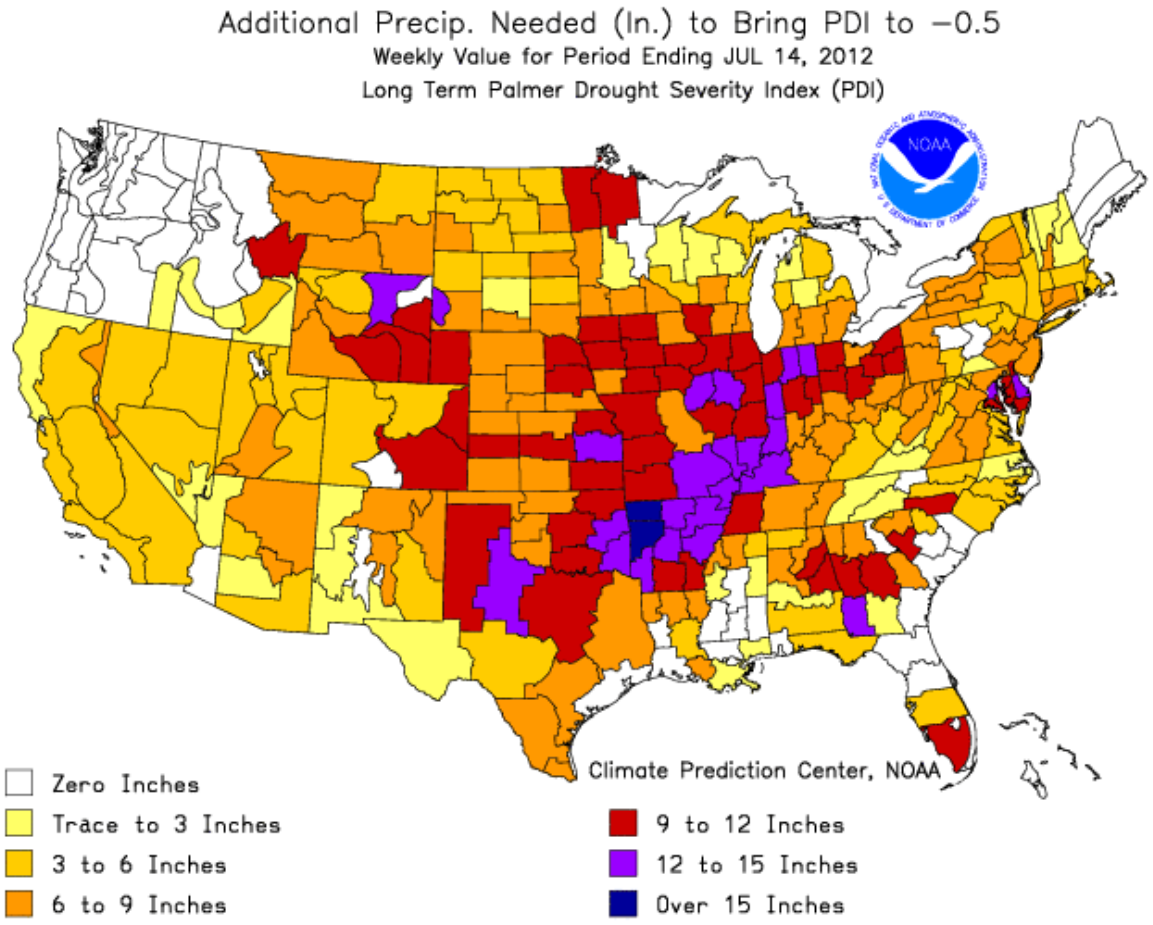
Drought Breaker
How Much Rainfall Needed?

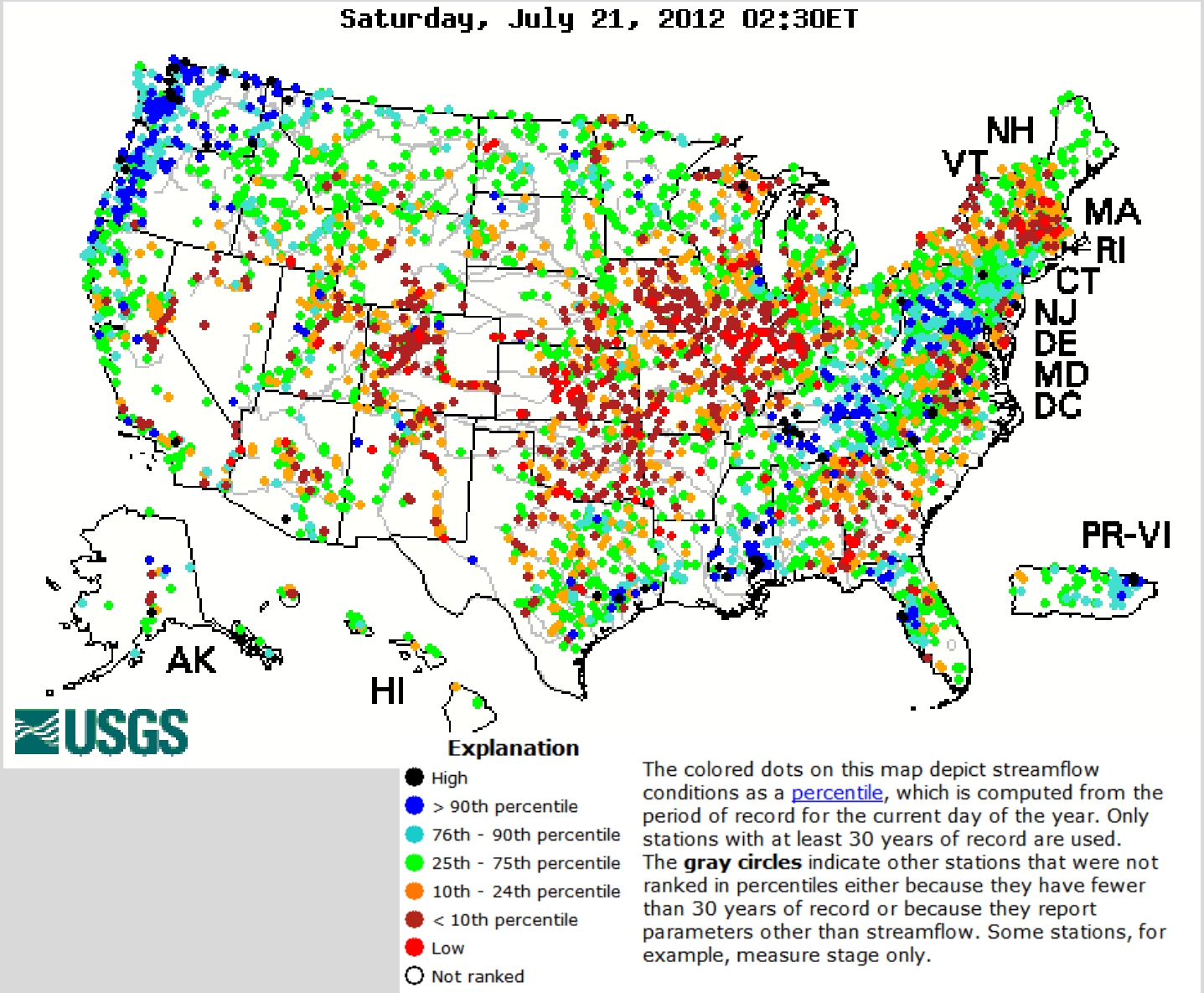
- 9-15 inches of rain needed to end drought across many areas of Central Region
- Rest of Central Region would need 3-9 inches of rain
- Updated weekly



Source:
NWS Climate Prediction Center
http://www.cpc.ncep.noaa.gov/

Stream Flow Conditions

- Low flow conditions developing across Central Region
- Worst hit states are Illinois, Indiana, Iowa, Missouri, Kansas, Colorado, Wyoming, Nebraska, Wisconsin and Michigan



Source:
U.S. Geological Survey
http://waterdata.usgs.gov/usa/nwis/rt/

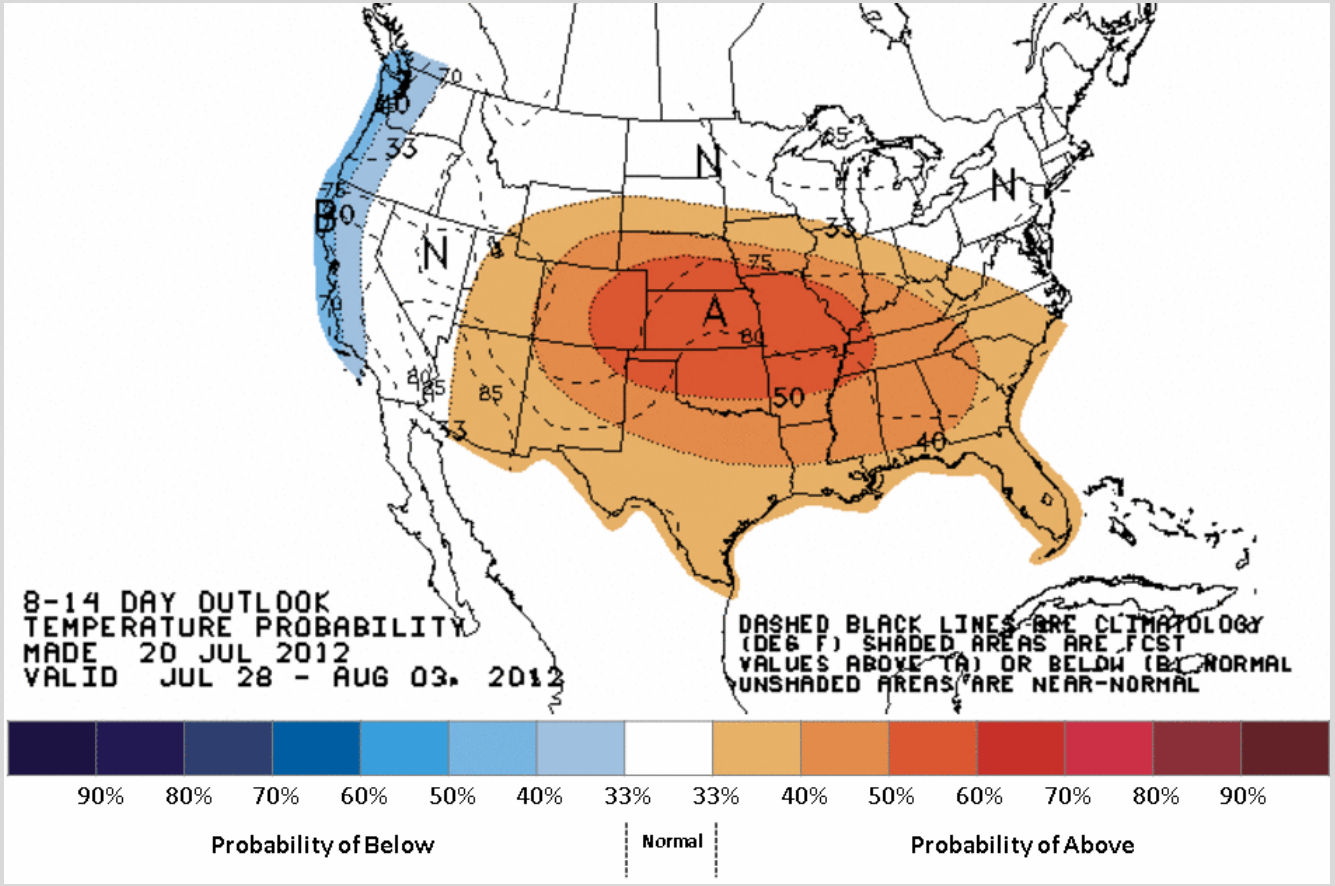
Drought Links

- National Drought Mitigation Center http://drought.unl.edu/
  - National Drought Monitor http://droughtmonitor.unl.edu/
- National Weather Service Climate Prediction Center http://www.cpc.noaa.gov
  - Drought Outlook
    http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif
- U.S. Department of Agriculture http://www.usda.gov/
  - Weekly Crop Report
  - http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/wwcb.pdf
- U. S. Drought Portal http://www.drought.gov/

Outlooks

8-14 Day Outlook Temperature

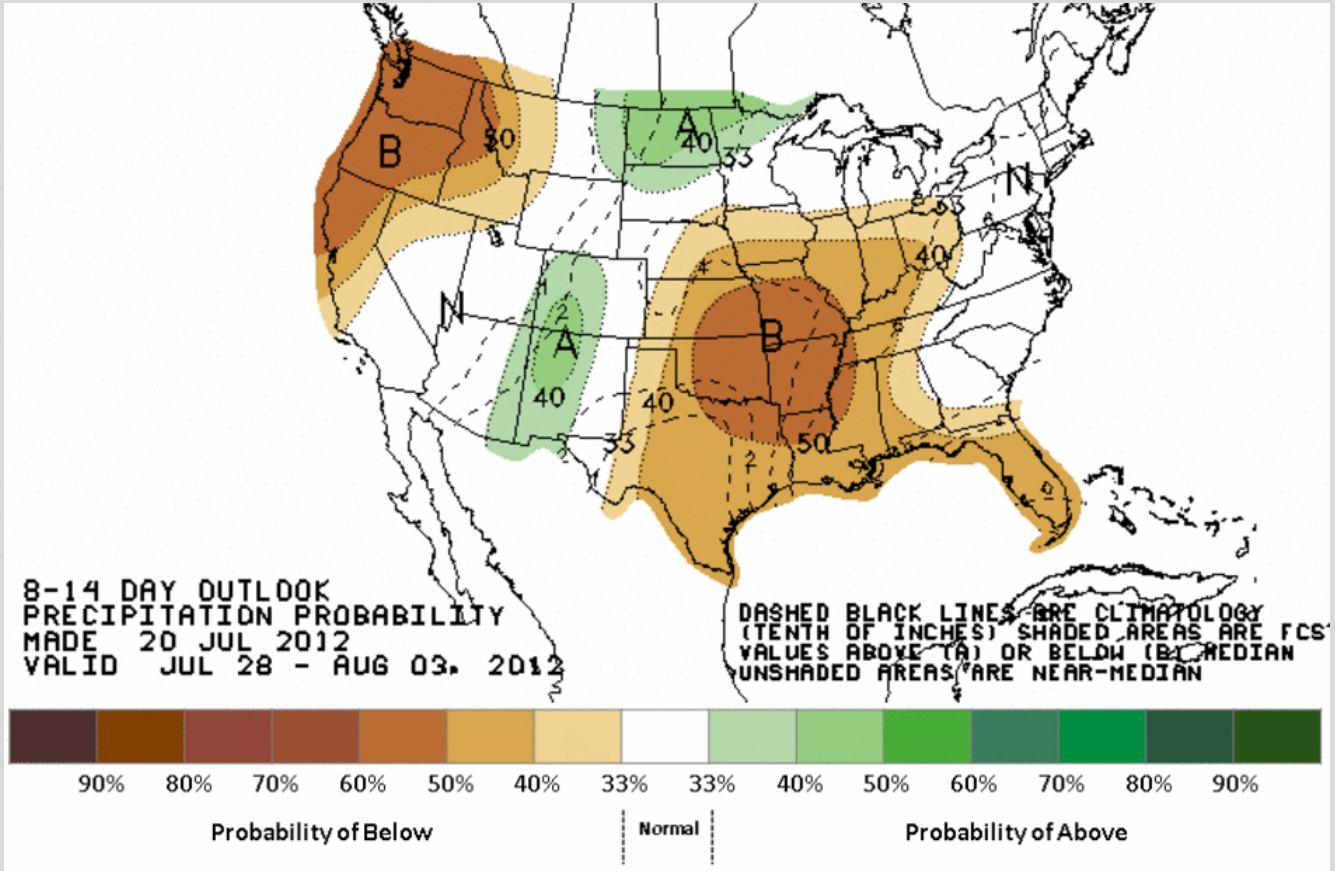
- Warmer than normal temperatures across Central Region through the end of July



Source:
NWS Climate Prediction Center
http://www.cpc.ncep.noaa.gov/

8-14 Day Outlook Precipitation

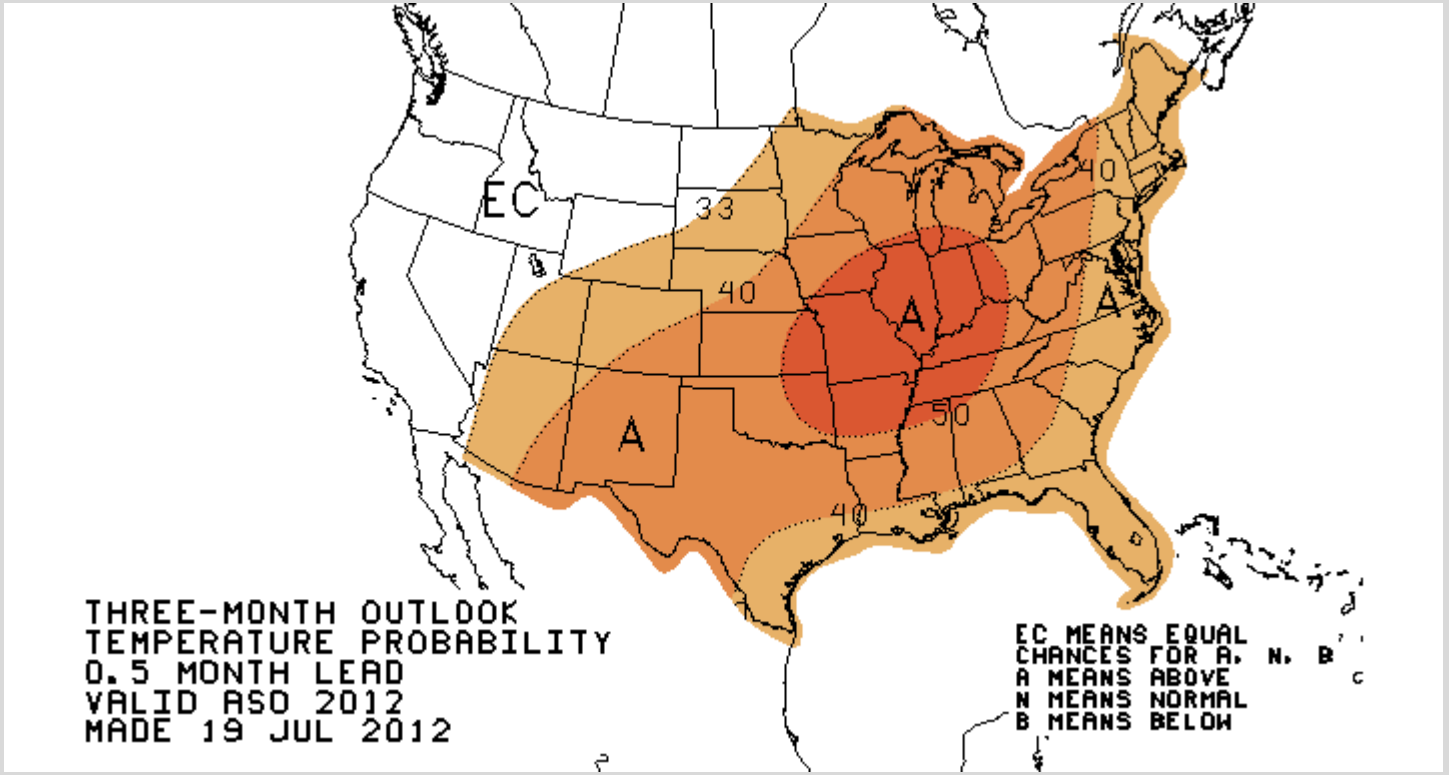
- Below normal precipitation for Central Region except for the West and North
- Summer monsoon season underway with improving moisture across Colorado
- Typical summer storm track will keep higher precipitation across the north



Source:
NWS Climate Prediction Center
http://www.cpc.ncep.noaa.gov/

3-Month Outlook Temperature

- Probabilities lean towards warmer than normal temperatures across Central Region through September

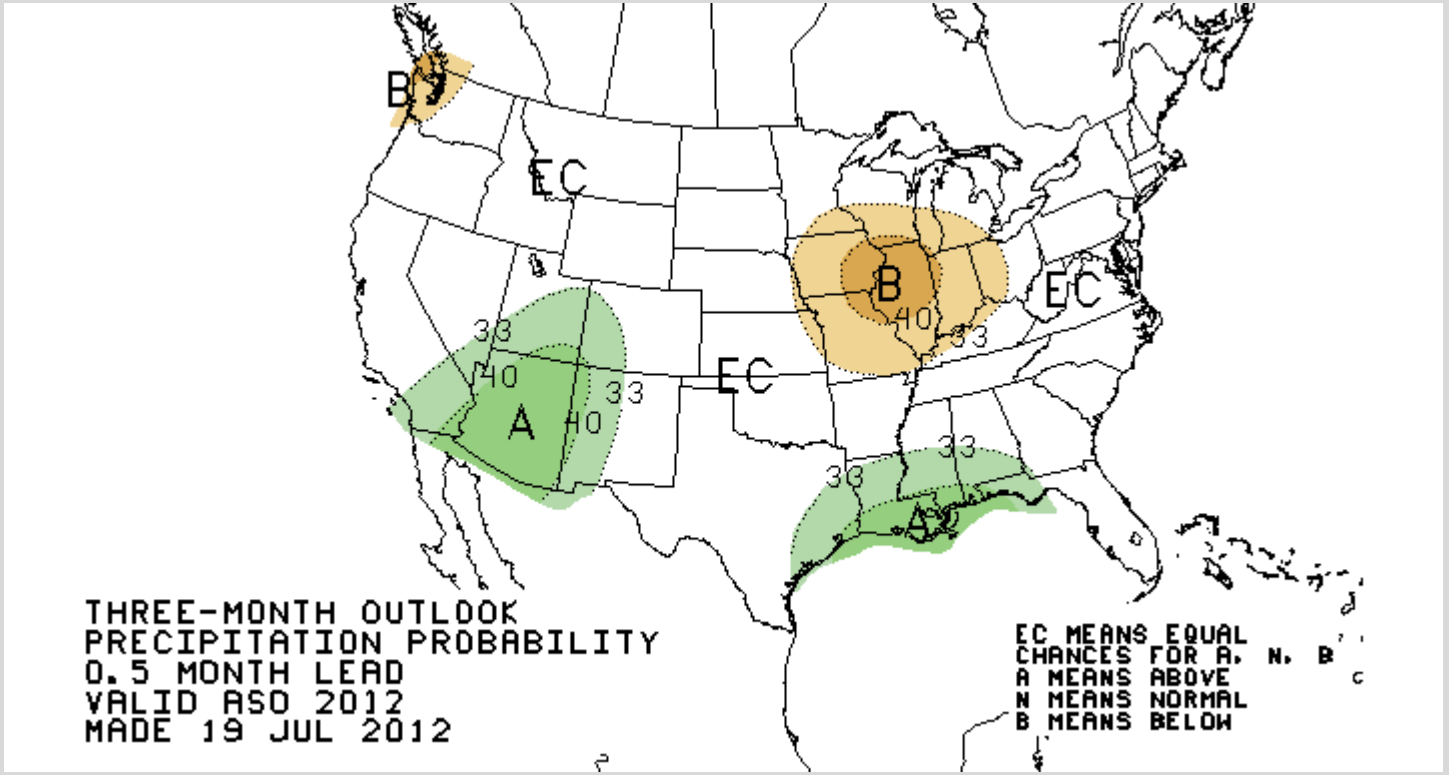


Source:
NWS Climate Prediction Center
http://www.cpc.ncep.noaa.gov/

3-Month Outlook Precipitation

- Equal chances of above, near, or below normal precipitation through September.

Source:
NWS Climate Prediction Center
http://www.cpc.ncep.noaa.gov/



Contact: John Eise john.eise@noaa.gov

Record Heat
Climate Statistics

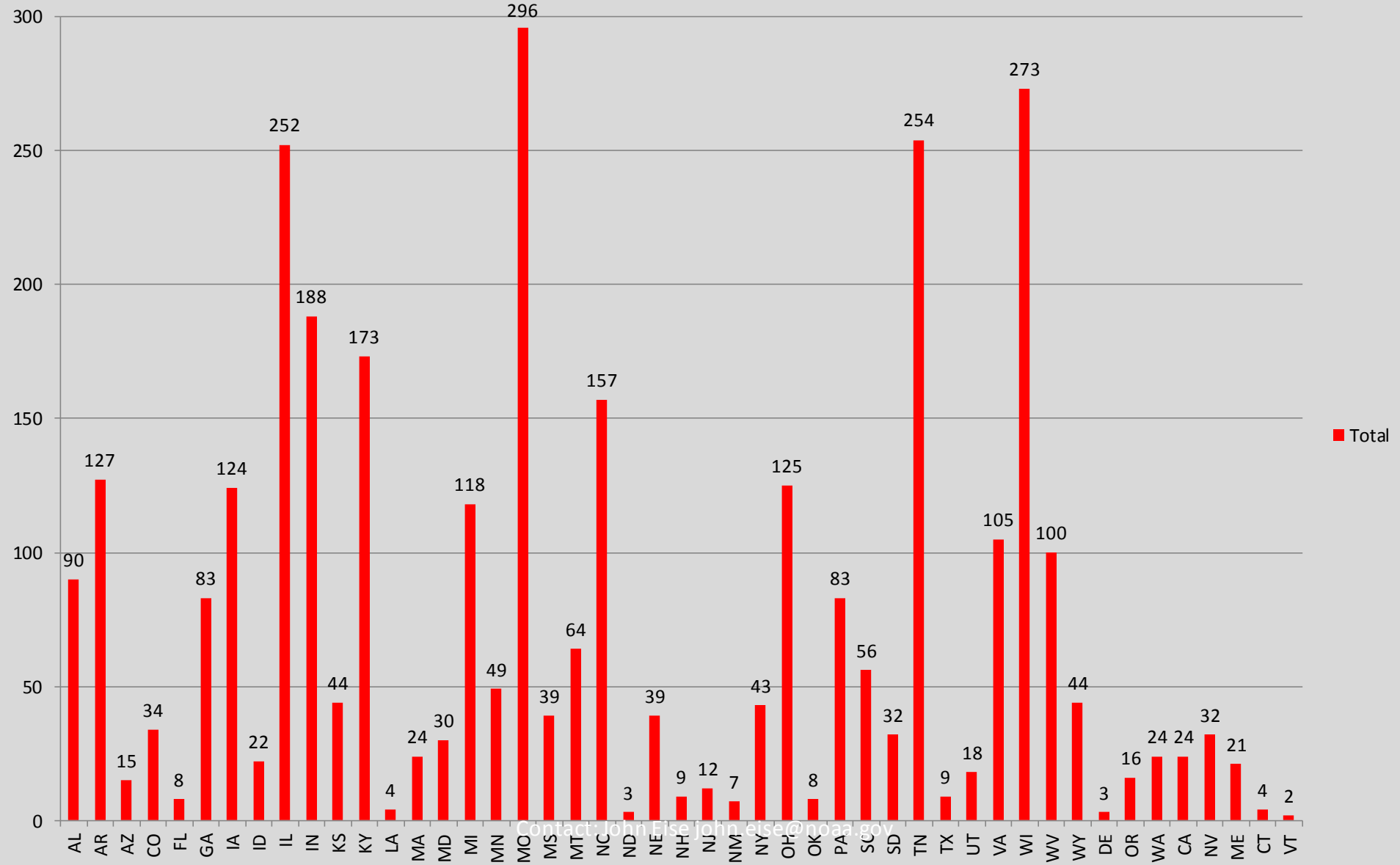
July 2012 Records
Nationwide

Daily Records	**3287**
100+ Deg Records	**1950**

All Time Records	**159**
100+ Deg Records	**149**

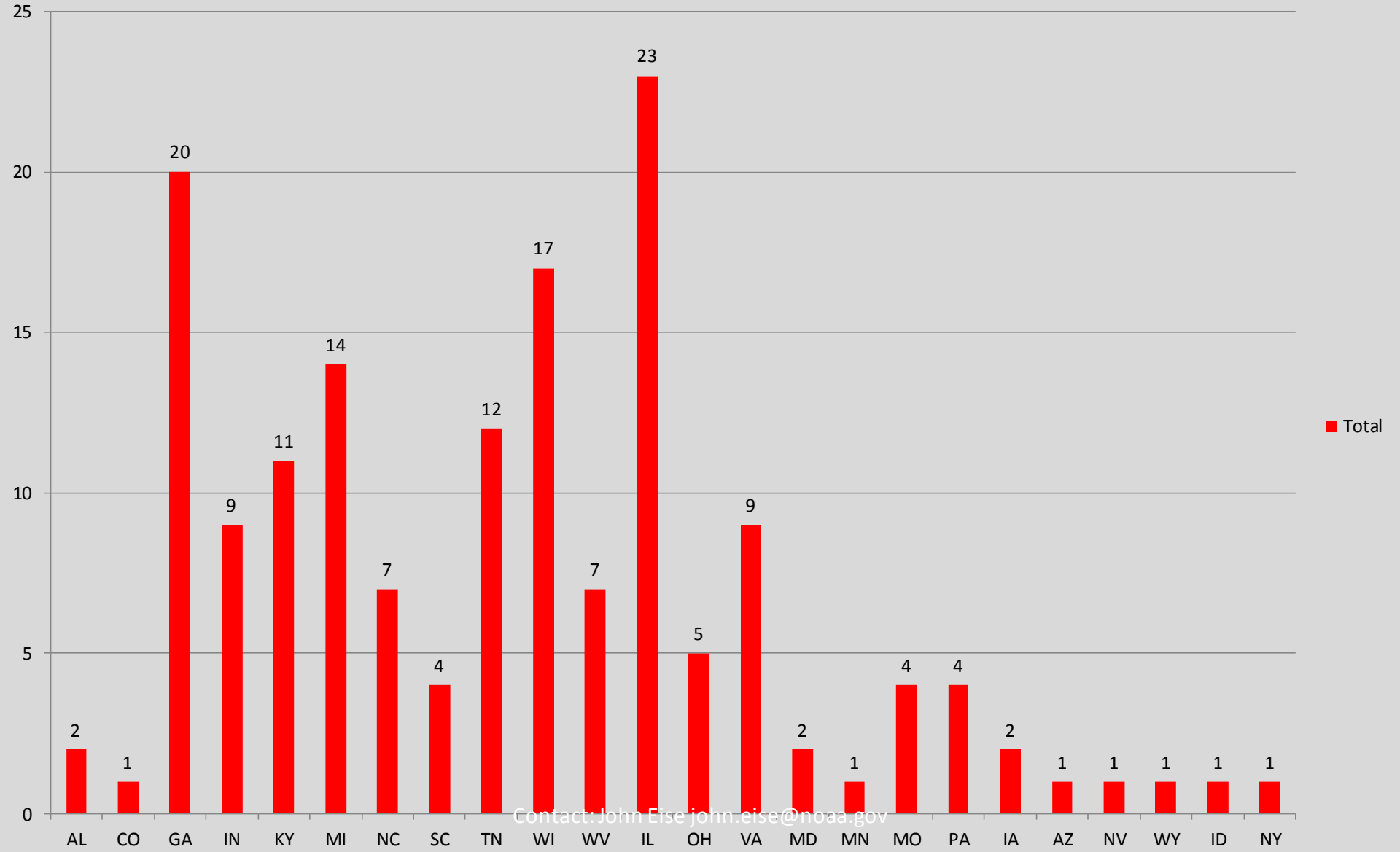
Source:
National Climatic Data Center
http://www.ncdc.noaa.gov/extremes/records/

Record Daily High Temperatures
Nationwide - July 2012



All Time Record High Temperatures

Nationwide - July 2012



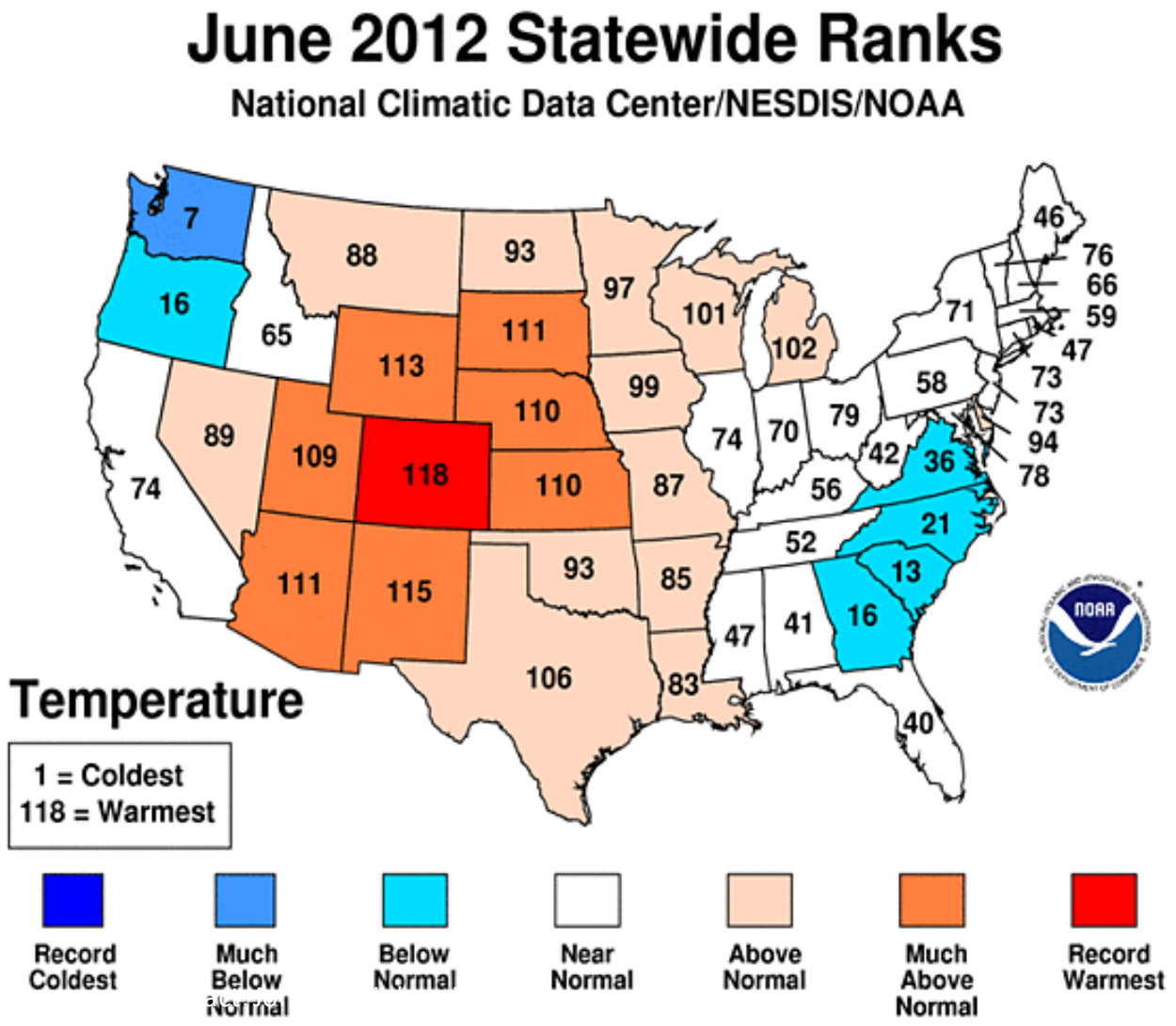
Contact: John Eise john.eise@noaa.gov

June 2012 Summary
Nationwide

Records Set in June 2012

Historical Temperature Ranking
By State for 118 Years – June 2012

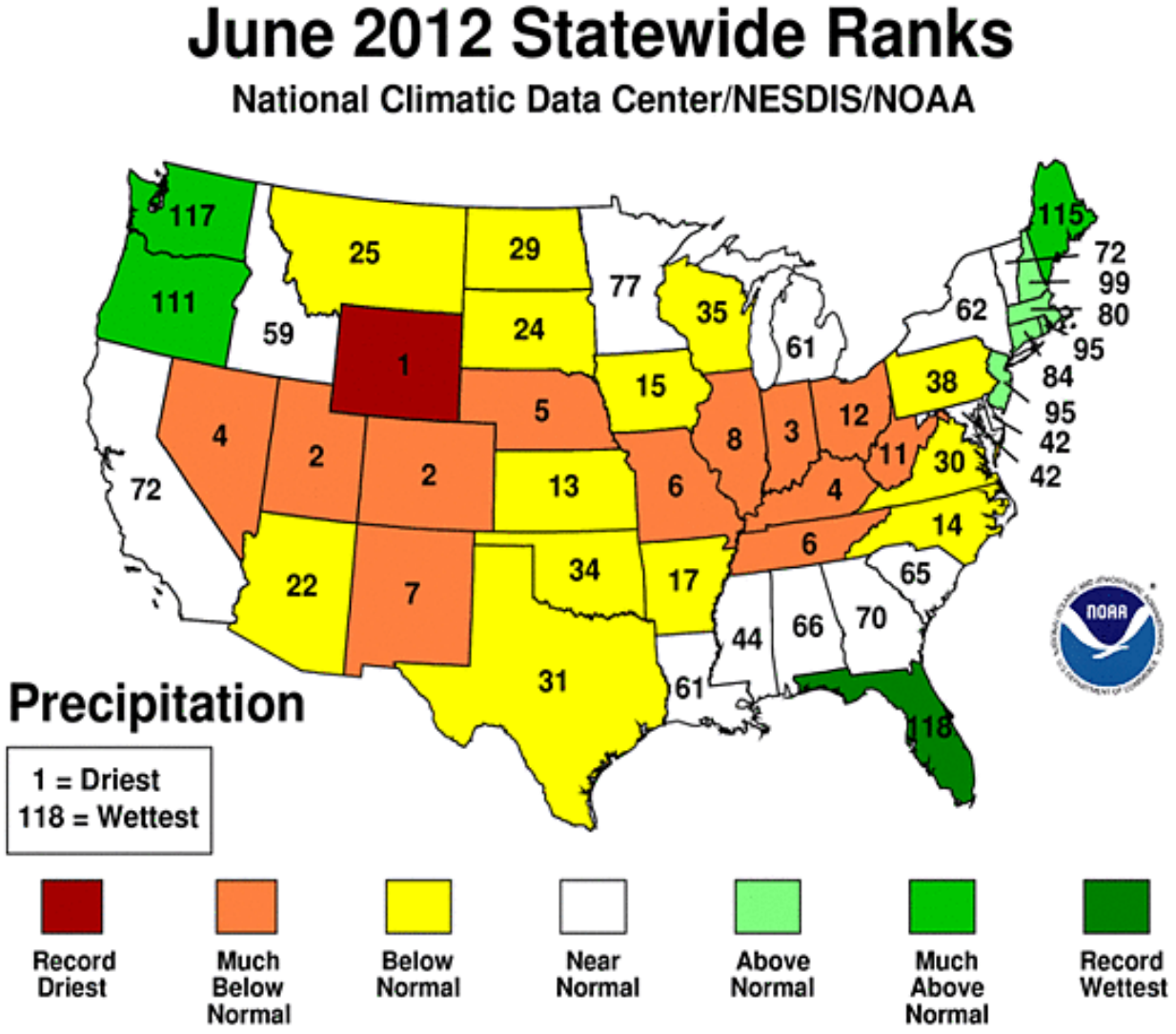
- Hottest Month on Record in Colorado
- Top 10% for Wyoming, South Dakota, Nebraska and Kansas



Source:
National Climatic Data Center
http://www.ncdc.noaa.gov/sotc/

Historical Precipitation Ranking
By State for 118 Years – June 2012

- All Time Record Dry June in Wyoming
- 2nd Driest June in Colorado
- Top 1% Driest June for Nebraska, Missouri, Illinois, Indiana and Kentucky



Source:
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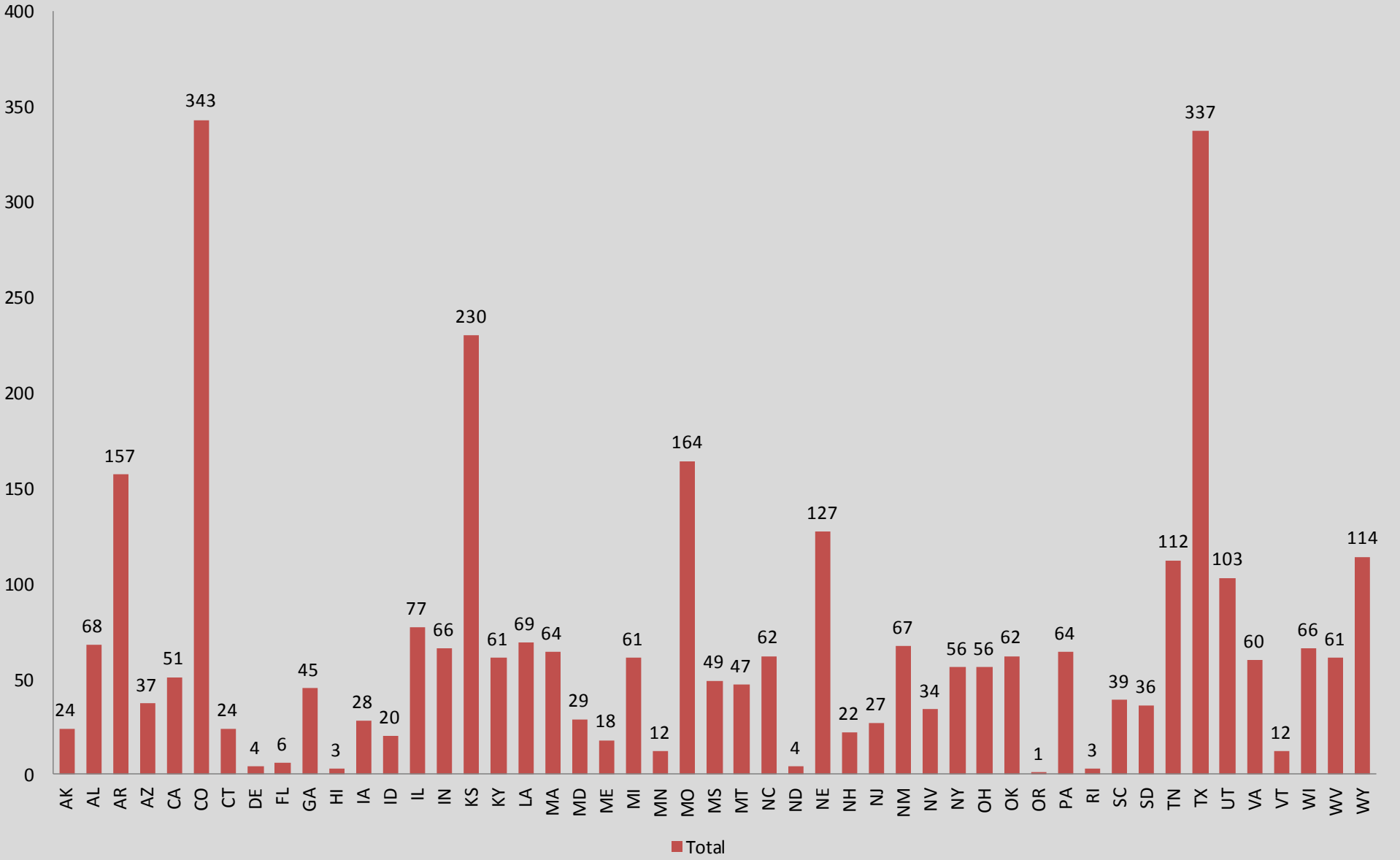
Record Daily High Temperatures
Nationwide - June 2012



All Time Daily High Temperatures
Nationwide - June 2012

Update: July 5, 2012